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Figure 1
Map of Human IL-17 Like cDNA (SEQ ID NO:1) and
Amino Acid (SEQ ID NO:2) Sequences

1	CTCAAGTCACTCCCTAAAAAGACAGTGGAAATAAATTGAATAACAAACAGGCTTGCT	
61	GAAAATAAAATCAGGACTCCTAACCTGCTCCAGTCAGCCTGCTTCCACGAGGCTGTGTCAG	
121	TCAGTGCCCCCACTTGTGACTGAGTGTGCAGTGCCCCAGCATGTACCAGGTGGTTGCATTCT	
1		M Y Q V V A F L
181	TGGCAATGGTCATGGGAACCCACACCTACAGCCACTGGCCCCAGCTGCTGCCCCAGCAAAG	8
9	A M V M G T H T Y S H W P S C C P S K G	28
241	GGCAGGACACCTCTGAGGAGCTGCTGAGGTGGAGCACTGTGCTGCTGCCCTCCCTAGAGC	48
29	Q D T S E E L L R W S T V P V P L E P	68
301	CTGCTAGGCCCCAACCGCCACCCAGAGTCCTGTAGGGCCAGTGAAGATGGACCCCTCAACA	88
49	A R P N R H P E S C R A S E D G P L N S	108
361	GCAGGGCCATCTCCCCCTGGAGATATGAGTTGGACAGAGACTTGAACCGGCTCCCCCAGG	128
69	R A I S P W R Y E L D R D L N R L P Q D	148
421	ACCTGTACCACGCCCGTTGCCCTGTGCCCCGCACTGCGTCAGCCTACAGACAGGCTCCACACA	
89	L Y H A R C L C P H C V S L Q T G S H M	
481	TGGACCCCGGGCAACTCGGAGCTGCTTACCACAAACCAGACTGTCTTCTACCGCGGCG	
109	D P R G N S E L L Y H N Q T V F Y R R P	
541	CATGCCATGGCGAGAAGGCAACCCACAAAGGCTACTGCCCTGGAGCGCAGGCTGTACCGTG	
129	C H G E K G T H K G Y C L E R R L Y R V	
601	TTTCCTTAGCTTGTGTGTGTGCGGCCCGCTGTGATGGGCTAG 643	
149	S L A C V C V R P R V M G * 162	

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Figure 2A

(Map of Mouse IL-17 Like cDNA (SEQ ID NO:3) and Amino Acid
(SEQ ID NO:4) Sequences with Predicted Signal Peptide

1	ATGTACCAGGCTGTTGCATCTTGGCAATGATCGTGGAAACCCACACCGTCAGCTTG	19
	M Y Q A V A F L A M I V G T H T V S L	
58	CGGATCCAGGAGGCTGCAGTCACTTGCCACAGCTGCTGCCCCAGCAAGAGCAAGAACCC	39
111	R I Q E G C S H L P S C C P S K E Q E P	
118	CCGGAGGAGTGGCTGAAGTGGAGCTCTGCATCTGTGTCCCCCCCAGAGCCCTCTGAGCCAC	59
31	P E E W L K W S S A S V S P P E P L S H	
178	ACCCACCACGAGAATCCTGCAGGGCCAGCAAGGATGGCCCCCTCAACAGCAGGGGCCATC	79
51	T H H A E S C R A S K D G P L N S R A I	
238	TCTCCTTGGAGCTATGAGTTGGACAGGACTTGAATCGGGTCCCCCAGGACCTGTACCAC	99
71	S P W S Y E L D R D L N R V P Q D L Y H	
298	GCTCGATGCTGTGCCACACTGCGTCAGCCTACAGACAGGCTCCCACATGGACCCGCTG	119
91	A R C L C P H C V S L Q T G S H M D P L	
358	GGCAACTCCGTCCCACCTTACCACAACCAGACGGTCTTCTACCGCGGCCATGCCATGGC	139
111	G N S V P L Y H N Q T V F Y R R P C H G	
418	GAGGAAGGTACCCATCGCCGCTACTGCTTGGAGCGCAGGCTCTACCGAGTCTCCTTGGCT	159
131	E E G T H R R Y C L E R R L Y R V S L A	
478	TGTGTGTGTGCGGCCCCGGTCAATGGCTTAGTCATGCTCACACCTGCCTGAGGCTGA	170
160	C V C V R P R V M A *	
538	TGCCCGGTTGGGAGAGAGGGCCAGGTGTACATACCTTGCCAAATCGGGCCGGGTTCAA	
598	GCCCTCCAAAGCCCTACCTGAAGCAGCAGGCTCCCGGACAAAGATGGAGGACTTGGGGAG	
658	AAACTGTGACTTTTGCACTTTTGGAAAGCACTTTTGGGAAGGAGCAGGTTCCCGCTTGTGC	

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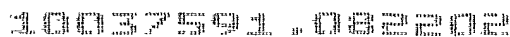


Figure 2B

Map of Non-Secreted Form of Mouse IL-17 Like cDNA (SEQ ID NO:9), and
Corresponding Amino Acid Sequence (SEQ ID NO:10)

1	CCGGCAGGTGCCCTCGCGCGTCCCAAAGCTTAGGGAAGCTCCAGGTGCTTGGGAAAT	
61	GAAGAAAAGGCCACCGAGCAAAAAGGAACAGAGAAGGGAGGAGCAGTGTGTTGGGCTC	
121	GCCTAGGGTCGAGGGCCATTATCACCTACAAATCAGAAATGTGGGAGTGCTATTCTAGAGG	
181	TCTCCATCTTTGCCATTGCTGGTGCCTCAGAAAAGTGTGATGGGGTTGTCCCATTTGCCA	
241	AGAACAGCTTCTGCTTACCAGCAGGTGCTGACCTCTTTCCCCAGAGGCACAGGGAAGGAA	
301	TTCCAGCCCCGGTTGGCTGCCAGAGGCTTCCCTCTGGCGTTGGGTACAGAGGCAGAGAAAG	
361	AAACCCCAAATGTCTCTATGAAAACAATGTCCCCCGTCATCCAGGCCAGATCATTTCTGC	
421	AGTGTCAACAGTTGAGACAAAGCTGGGGTCATTTTCTGTGCCCTAAGAGTGCCCTGTTCT	
481	GCAC TGGCCAAGGCTGTTGCATTCTTTGGCAATGATCGTGGGAACCCACACCCGTCAAGCTTG	
	M I V G T H T V S L	10
541	CGGATCCAGGAGGCTGCAGTCACTTGCCCCAGCTGCTGCCCCAGCAAAAGAGCAAGAACCC	
1111	R I O E G C S H L P S C C P S K E Q E P	30

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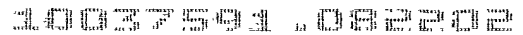


Figure 2C

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Figure 3A

Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L (SEQ ID NO:2),
with a Known Human IL-17 Family Member Amino Acid Sequence, hIL-17

(SEQ ID NO:5)

Smith-Waterman score: 155; 25.0% identity in 160 AA overlap

hIL-17L	XNQDSXPAPVSLPRGLSVSAPLVTECAVPSMYQVVAFLAMVMGHTYSHWPSCCPKSGQ	10	20	30	40	50	60
hIL-17	MTPGKTSLSVSLLLLSLEAIVKAGITIPRNP GCPNSEDK	10	20	30	40	50	60
hIL-17L	DTSEELLRWSTVPVPPLEPARPNRHPESCRASEDGPLNSRAISPWRYELDRDLNRLPQDL	70	80	90	100	110	120
hIL-17	NFPRTVMVNLNI-----HNRNTNTNPK--RSSD---YYNRSTSPWNLHRNEDPERYPSPVI	40	50	60	70	80	

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Figure 4

Pile-Up of Human IL-17 like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)
with a Known Human IL-20 Amino Acid Sequence, hIL-20 (SEQ ID NO:6)

SCORES Init1: 124 Initn: 124 Opt: 175

Smith-Waterman score: 175; 36.7% identity in 90 aa overlap

hIL-17L	70	80	90	100	110	120
	RWSTVPVP	PLEPARPNRHP	ESCRA	SGPLNSRA	ISPWRYELDRDLNRL	PQDLYHARCLC
hIL-20	70	80	90	100	110	120
	RNIEEMVAQLRNS	SELAQRKCEVN	QLWMSNKRSL	SPWGY	SINHDP	SRIPVDLPEARCLC
hIL-17L	130	140	150	160	170	180
	PHCVSLQ	TGSHMDPLG	NSVPLYHNQ	TVFYRRPC	HGEGTHRRYCLERRLYR	VSLA-CVCV
hIL-20	130	140	150	160	170	180
	LGC	VNPFTMQE-DR	SMVSV	VPVF-SQV	VPVRRRLCP	PPPTGP--CRQRAV
hIL-17L	190					
	RPRVMA					
hIL-20						
	F					

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Figure 5

Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)
with a Known Human IL-17 Amino Acid Sequence, hIL-17b (SEQ ID NO:7)
Family Member

SCORES Init1: 124 Initn: 124 Opt: 178
Smith-Waterman score: 178; 35.6% identity in 90 aa overlap

hIL-17L	70	80	90	100	110	120	
	RWSTVPVP	PLEPARPNRHP	ESCRA	SGDGPLNSRAIS	PWRYELDRDLNRL	PQDLYHARCLC	
hIL-17b	70	80	90	100	110	120	
	RNIEEMVAQLR	NSSELAQRKCE	VNLQLWMSNKR	SLSPWGSINHD	PSRIPVDLPEARCLC		
hIL-17L	130	140	150	160	170	180	
	PHCVSLQTGSH	MDPLGNSVPLY	HNQTVFYRRP	CHGEGTHRRYCL	ERRLYR-VSLACVCV		
hIL-17b	130	140	150	160	170	180	
	LGCVNPF	TMQE-DRSMVSPVF	-SQVPVRRRLCP	PPPTGP--CRQRAV	METIAVGCTCI		
hIL-17L	190						
	RPRVMA						
hIL-17b	F						
	180						

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Figure 6A

Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)
with Amino Acid Sequence of a Known Human IL-17 Family Member,
hIL-17c (SEQ ID NO:8)

SCORES Init1: 149 Initn: 194 Opt: 236

Smith-Waterman score: 243; 34.5% identity in 171 aa overlap

hIL-17L	20	30	40	50	60	69
	GLSVSAPLVTECAVPSMYQVVAF	LAMVMGTH	TYSHW-PSCCPSK	----	GQDTSEELLR	--
hIL-17c	10	20	30	40	50	
	MTLLPGLLFLTWLHTCLAHHDPSLRGHPHSHGTPHCYSAEELPLGQAPPHLLARGA					
hIL-17L	70	80	90	100	110	
	-WS-TVPVP----	PLEPARP-NRH--	PES----	C---RASE--	DGPLNSRAIS	PWRYELDRD
hIL-17c	60	70	80	90	100	110
	KWGQALPVALVSSLEAASHRGRHERPSATTQCPVLRPEEVLEADTHQRSIS	PWRYRVDTD				

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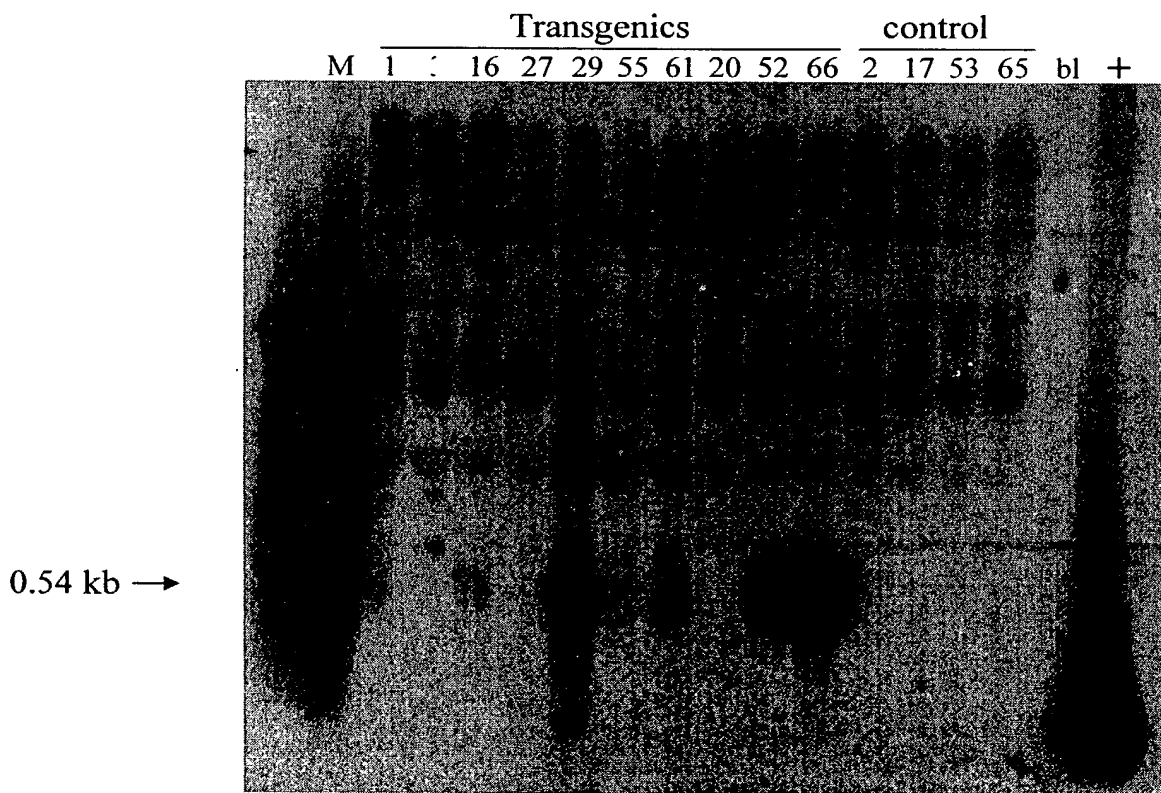
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Figure 7

Northern Blot Expression Analysis of TH00-018 Necropsied Transgenic Founders



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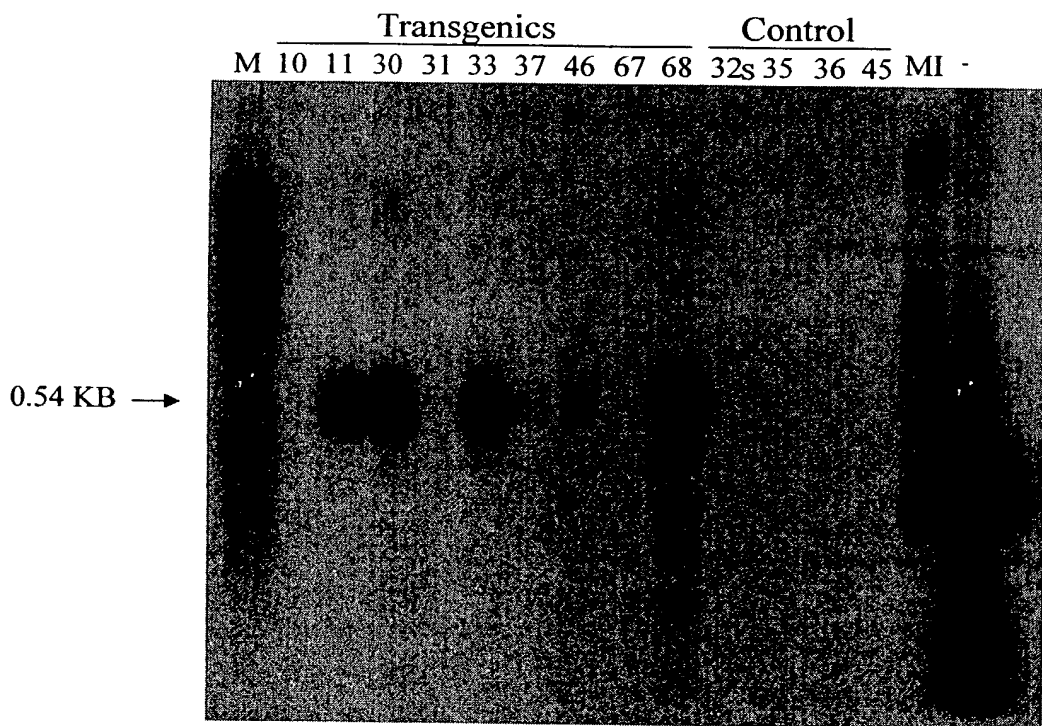
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Figure 8

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Northern Blot Expression Analysis of TH00-018
Hepatectomized Transgenic Founders



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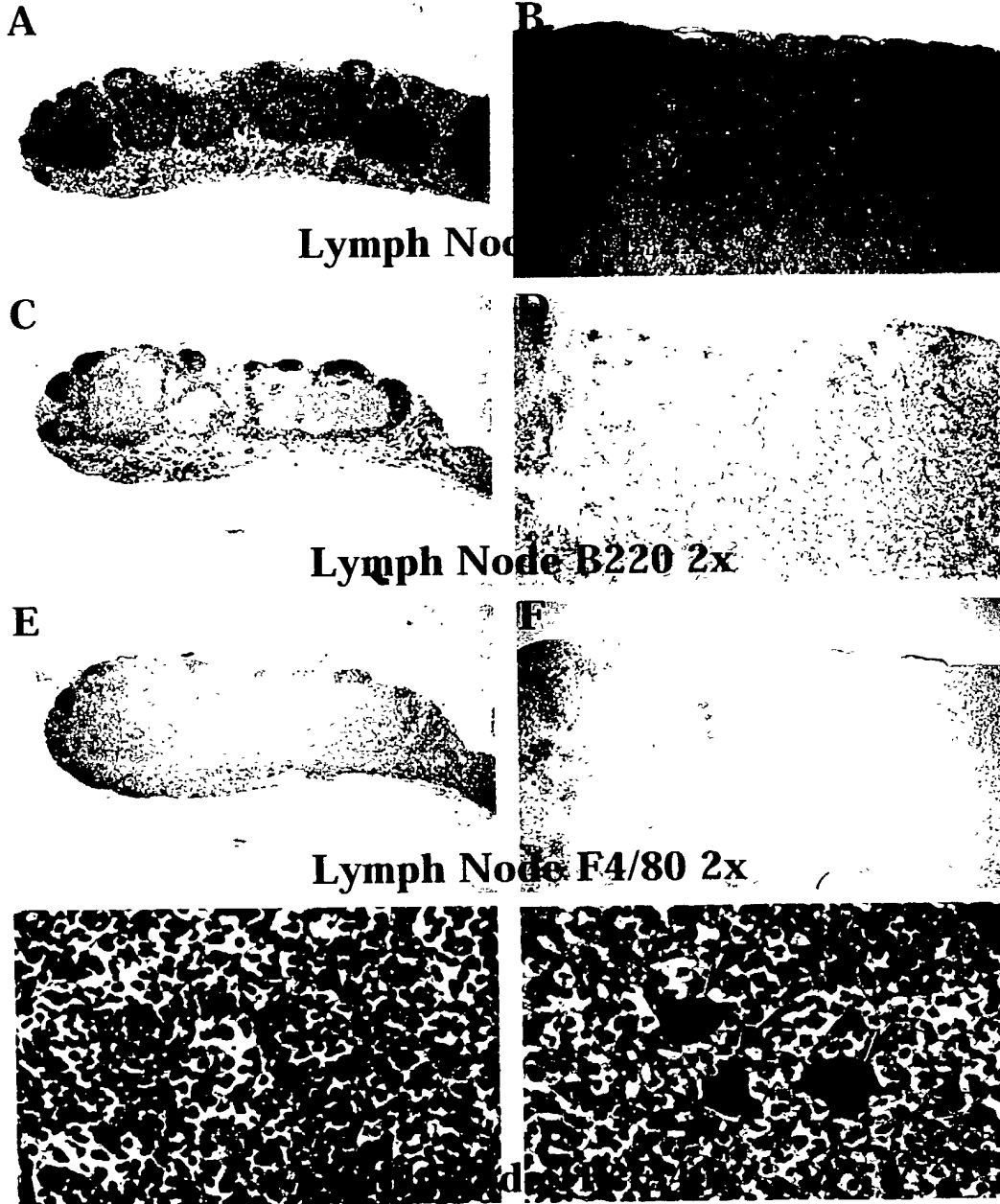
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Figure 9

Non-Transgenics IL-17E TransgenicsCOPY OF PAPERS
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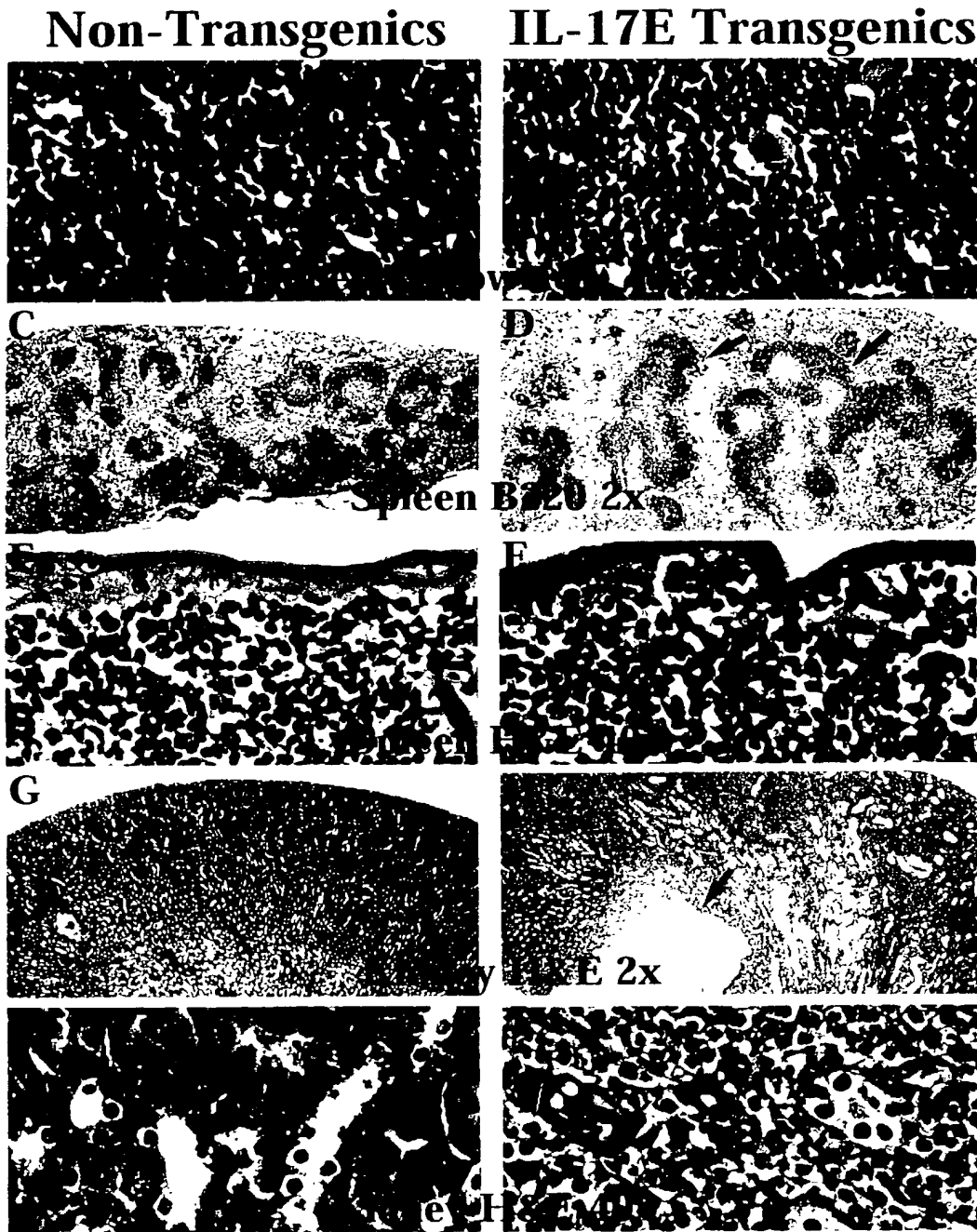
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Figure 10



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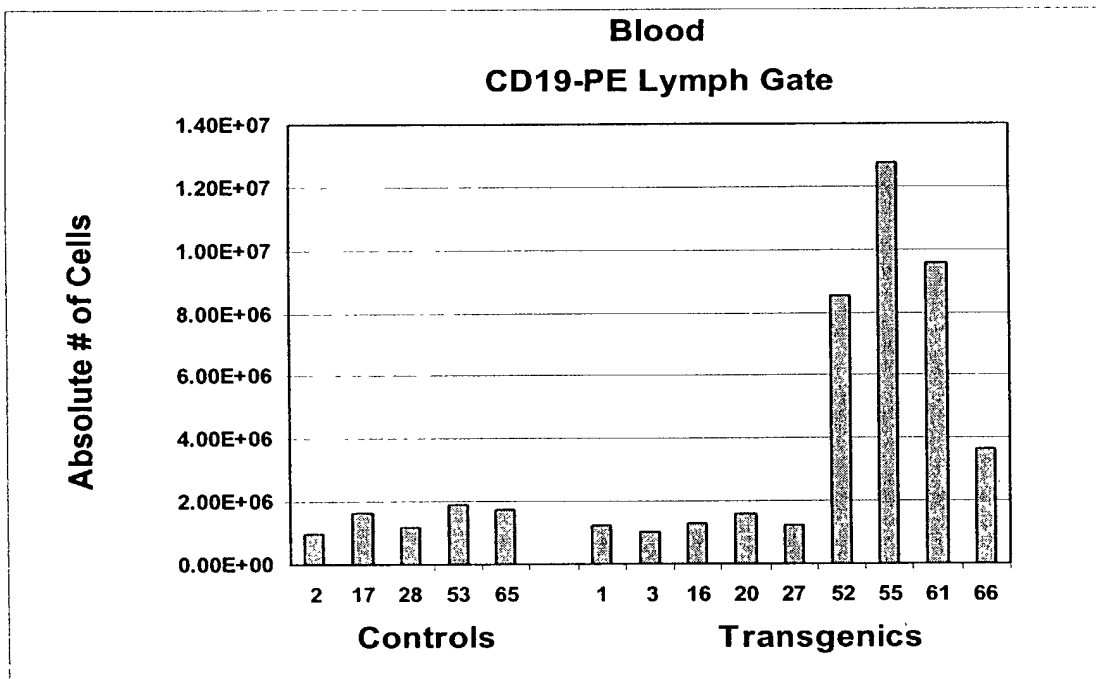


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Figure 11



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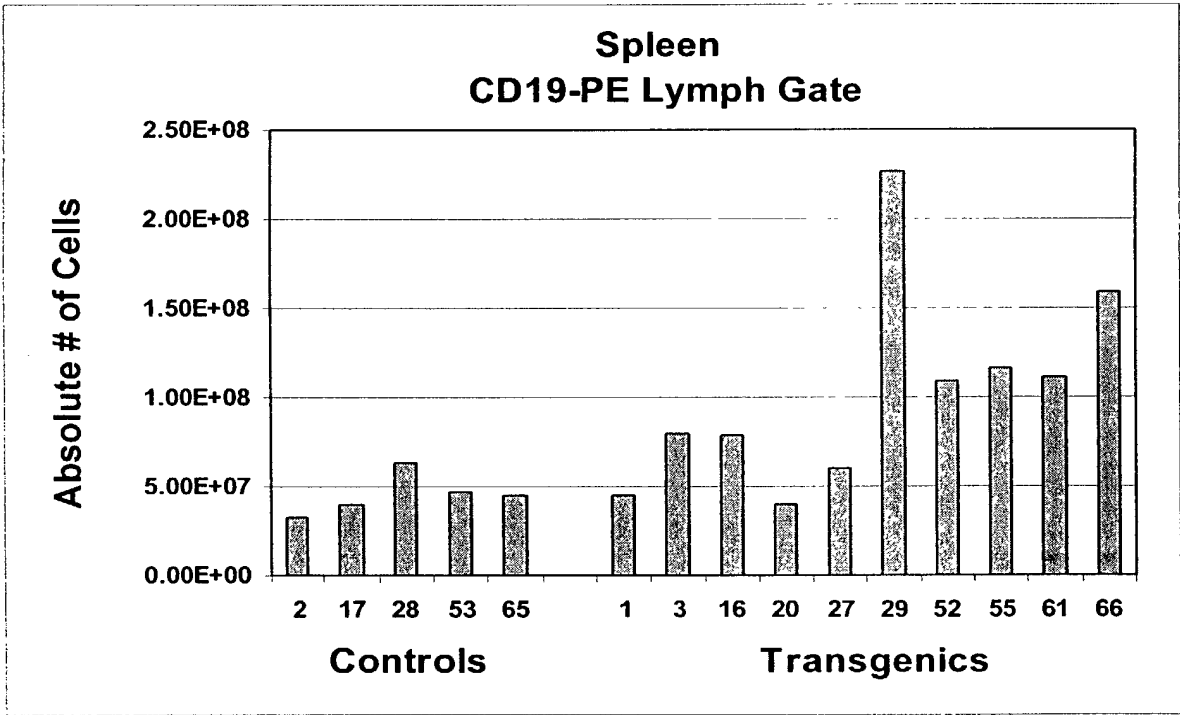
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Figure 12



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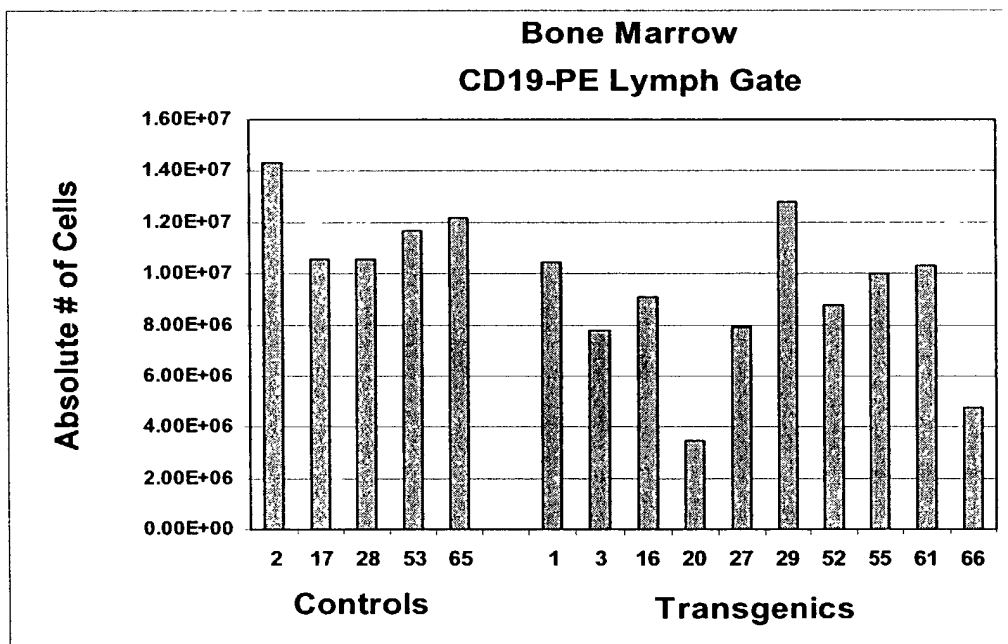
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Figure 13



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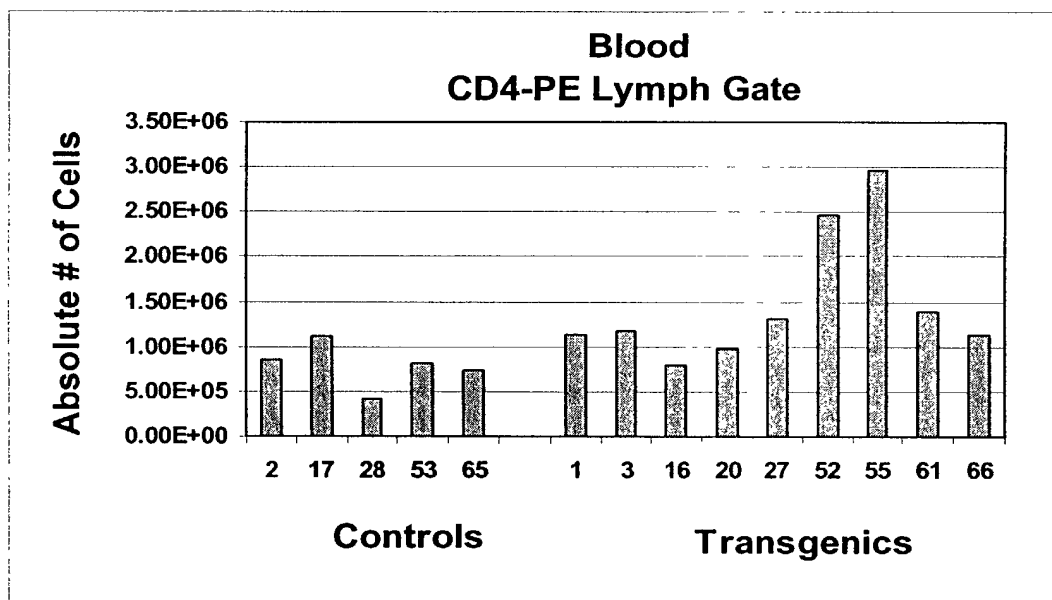
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Figure 14

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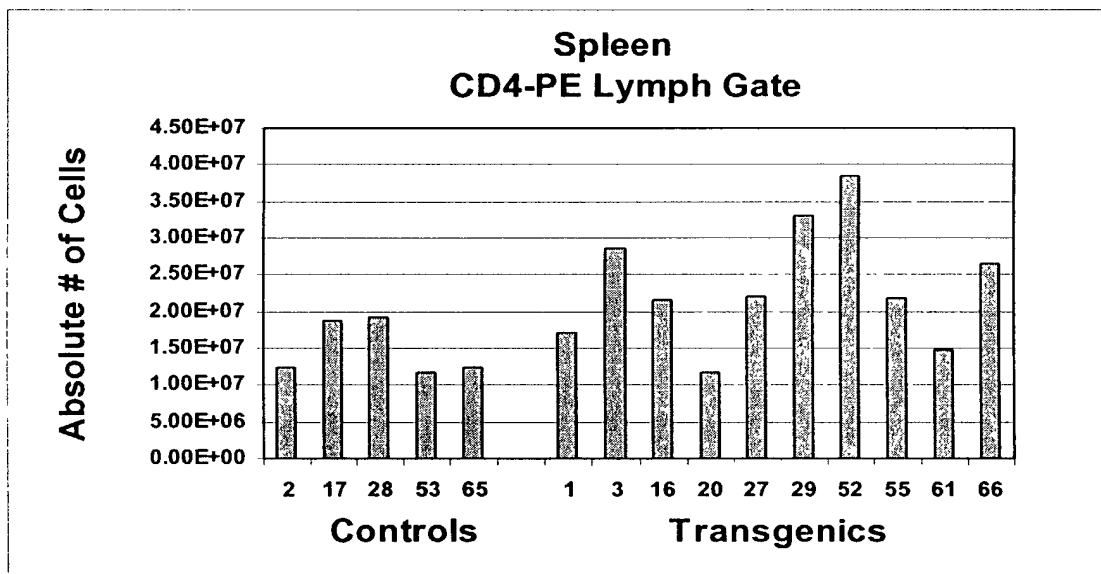
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Figure 15

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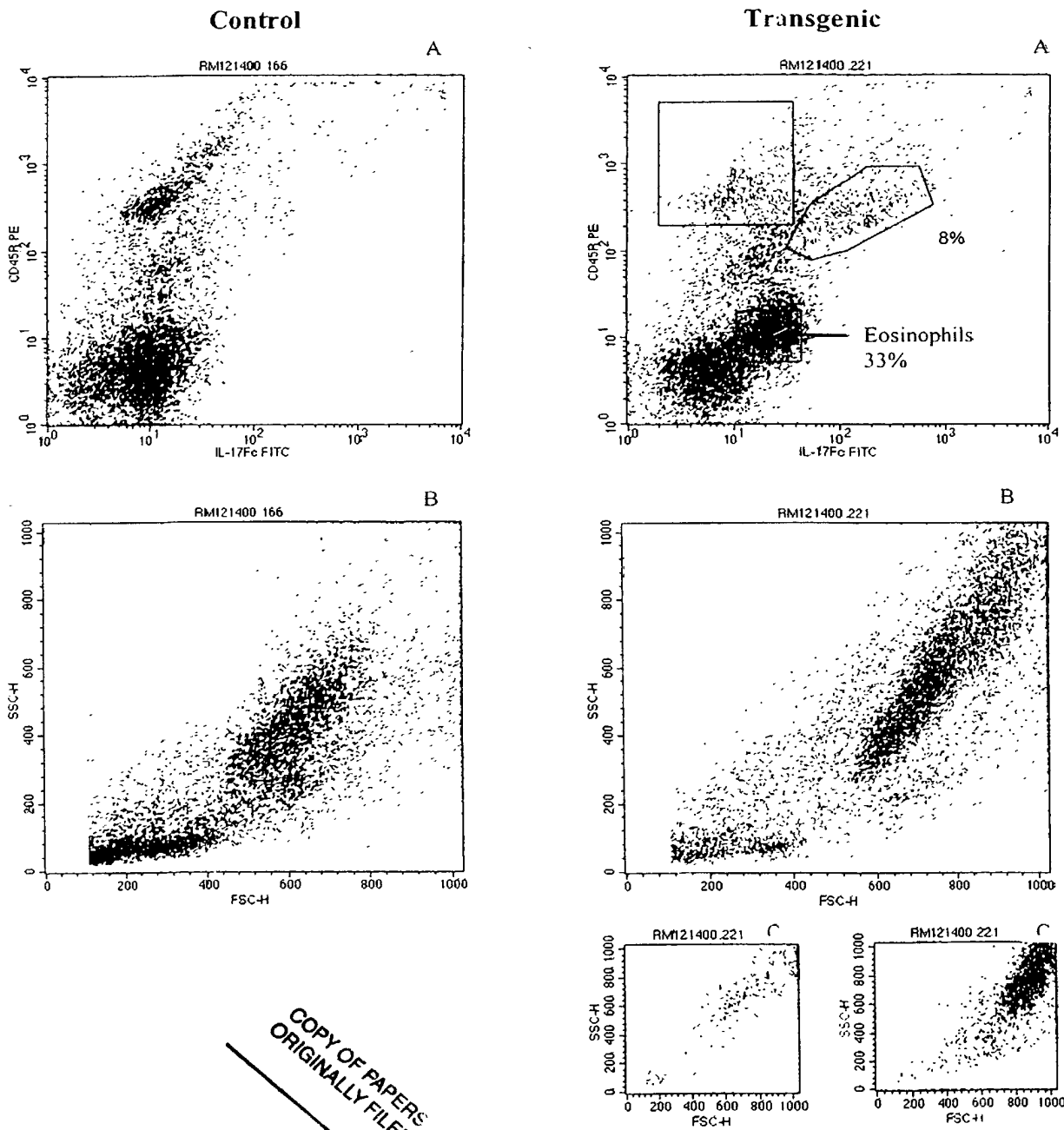
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Figure 16

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CD45R+ CELLS EXPRESSING IL17Br IN TRANSGENIC BONE MARROW



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Granulocyte-like
cells

Eosinophil-like cells



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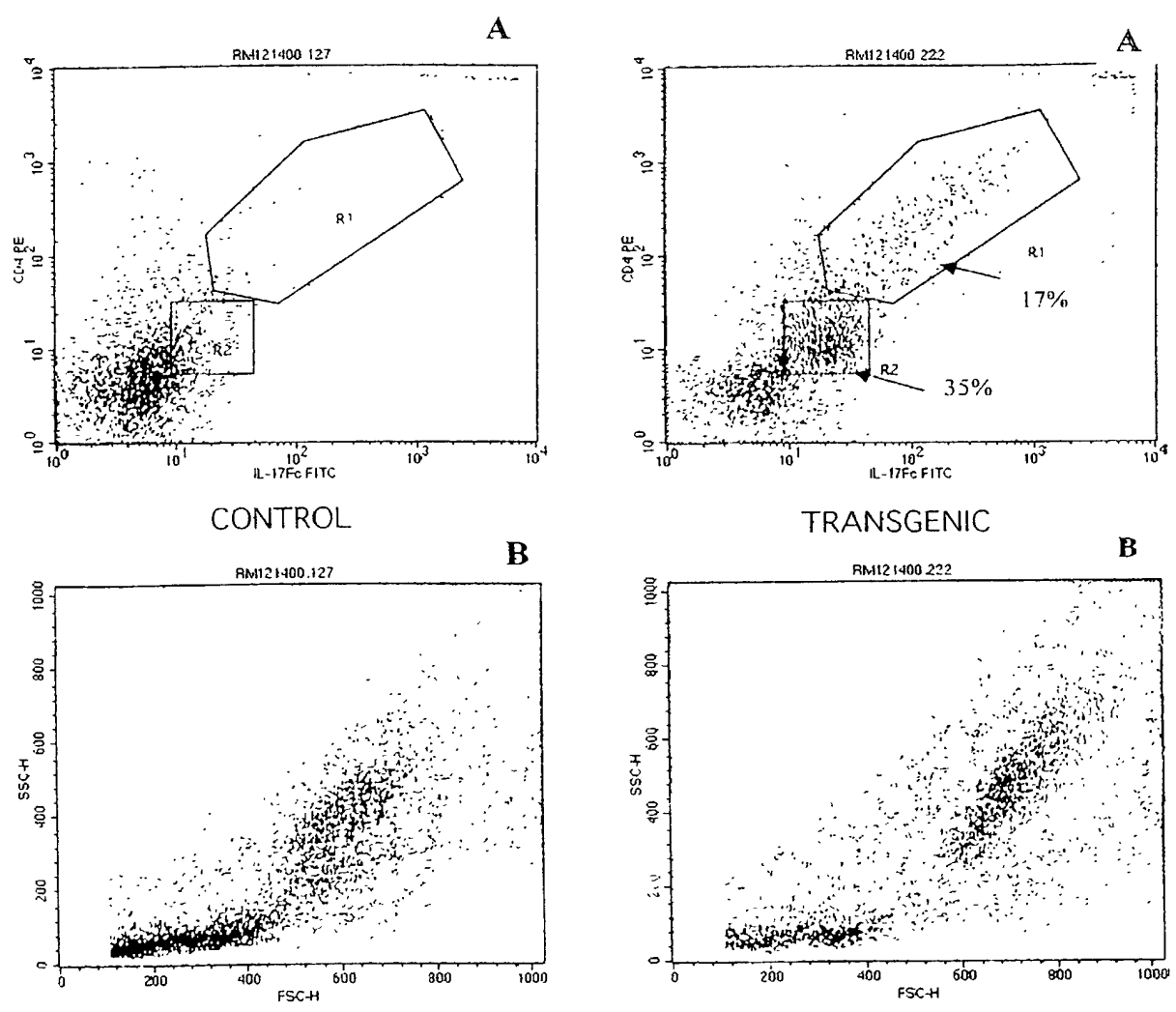
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Figure 17

CD4+ CELLS EXPRESSING
IL17Br IN TRANSGENIC BONE
MARROW



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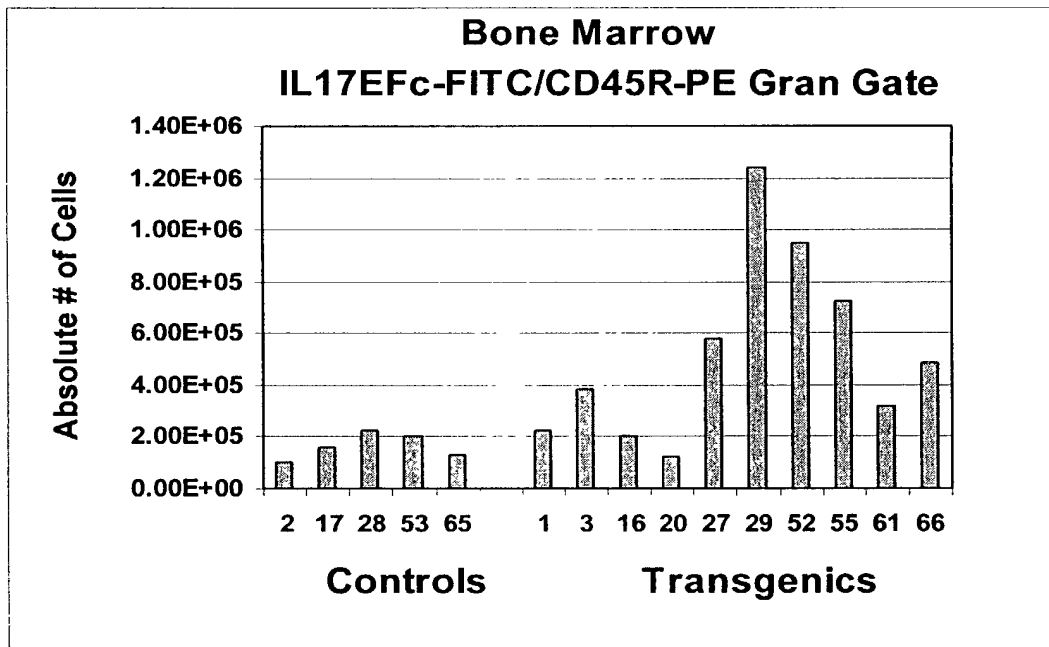
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Figure 18



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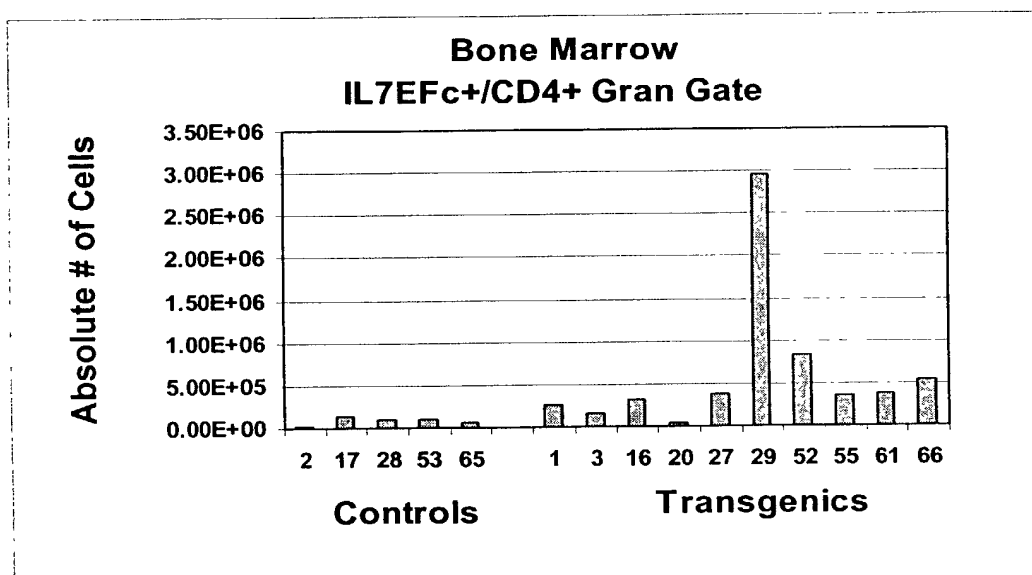
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Figure 19

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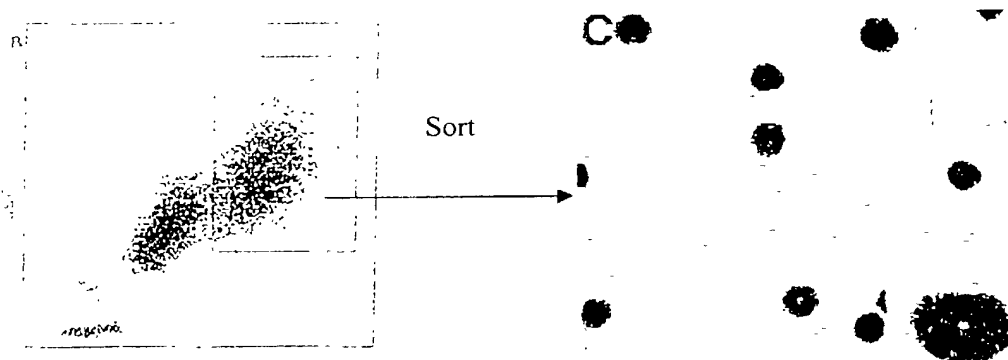
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Figure 20



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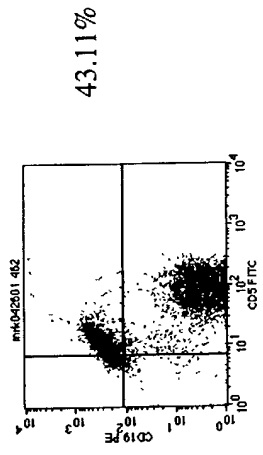
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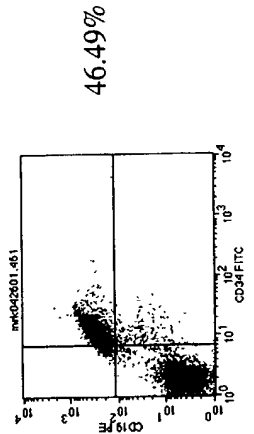
Figure 21A

Transgenic

CD5+ on CD19+ Lymphocytes in Lymph Node

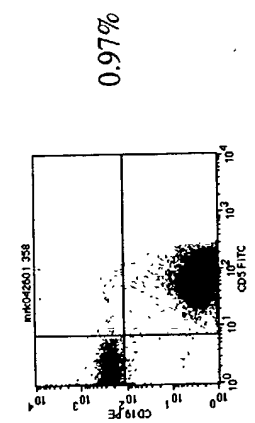


CD34+ on CD19+ Lymphocytes in Lymph Node

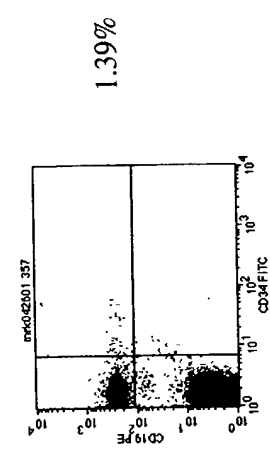


Non-transgenic Control

CD5+ on CD19+ Lymphocytes in Lymph Node



CD34+ on CD19+ Lymphocytes in Lymph Node



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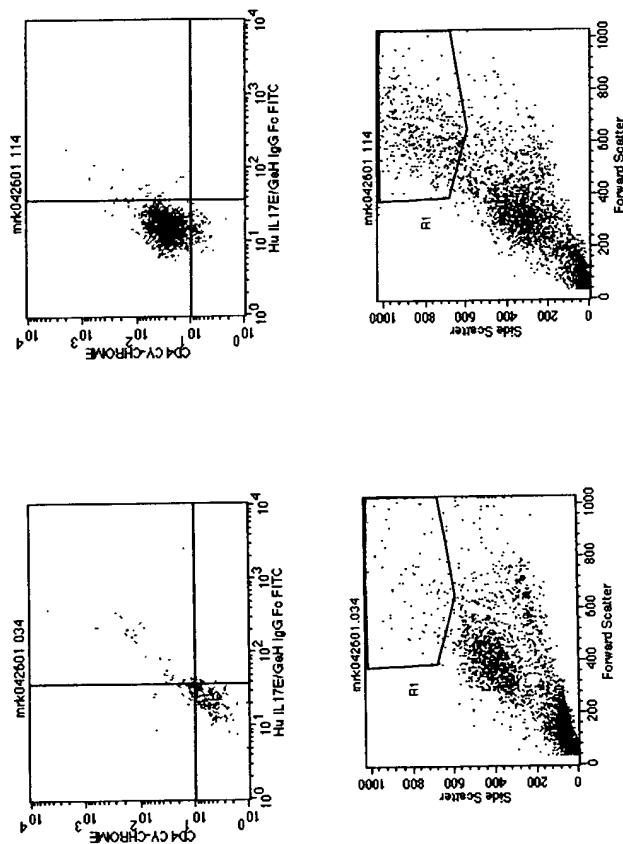


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Figure 21B

CD4 Expression on Eosinophils in Bone Marrow



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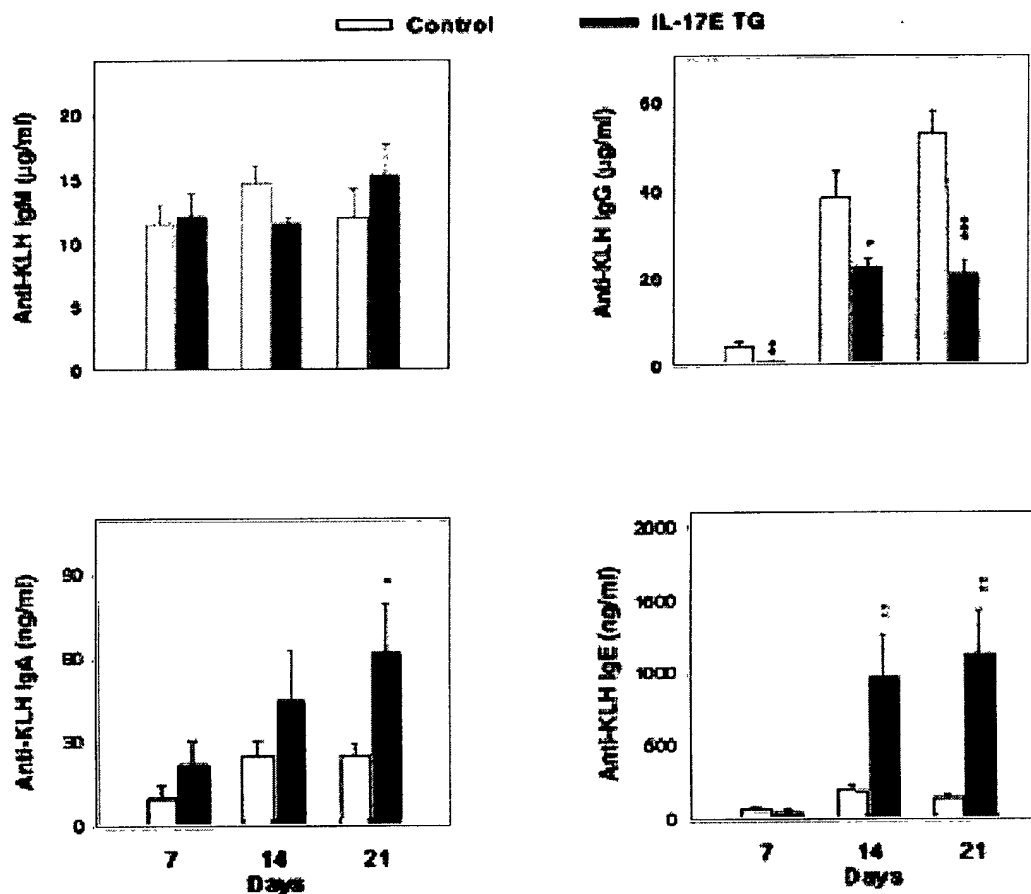


FIG.22

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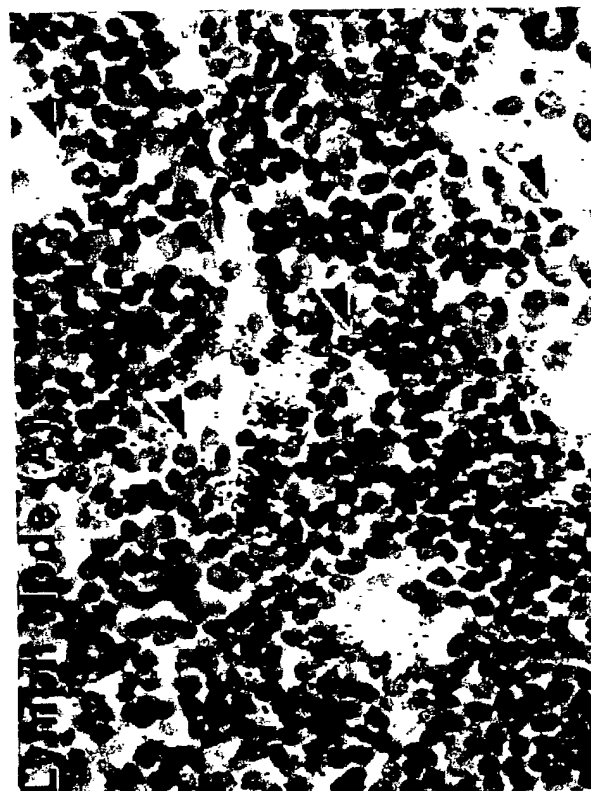


FIG.23

Mesentery (C)

Lung (B)

Lung (A)